

#2



OIEP

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/068,725

DATE: 02/26/2002  
TIME: 13:45:26

Input Set : A:\01-04.SEQ.txt  
Output Set: N:\CRF3\02262002\J068725.raw

ENTERED

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4 <110> APPLICANT: Kindsvogel, Wayne
6 <120> TITLE OF INVENTION: Antibodies That Bind Both BCMA and TACI
8 <130> FILE REFERENCE: 01-04
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/068,725
C--> 10 <141> CURRENT FILING DATE: 2002-02-06
10 <150> PRIOR APPLICATION NUMBER: 60/270,274
11 <151> PRIOR FILING DATE: 2001-02-20
13 <150> PRIOR APPLICATION NUMBER: 60/283,447
14 <151> PRIOR FILING DATE: 2001-04-12
16 <160> NUMBER OF SEQ ID NOS: 5
18 <170> SOFTWARE: FastSEQ for Windows Version 3.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 995
22 <212> TYPE: DNA
23 <213> ORGANISM: Homo sapiens
25 <220> FEATURE:
26 <221> NAME/KEY: CDS
27 <222> LOCATION: (219)...(770)
29 <400> SEQUENCE: 1
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31 acacagacag cccccgtaag aacccaagaa gcaggcgaag ttcattgttc tcaacattct 120
32 agctgctctt gctgcatttg ctctggaatt ctgtagaga tattacttgt ccttcaggc 180
33 tgttctttct gtagctccct tgttttcttt ttgtgatc atg ttg cag atg gct ggg 236
34                                     Met Leu Gln Met Ala Gly
35                                     1           5
36
37 cag tgc tcc caa aat gaa tat ttt gac agt ttg ttg cat gct tgc ata 284
38 Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser Leu Leu His Ala Cys Ile
39                                     10           15           20
40
41 cct tgt caa ctt cga tgt tct tct aat act cct cct cta aca tgt cag 332
42 Pro Cys Gln Leu Arg Cys Ser Ser Asn Thr Pro Pro Leu Thr Cys Gln
43                                     25           30           35
44
45 cgt tat tgt aat gca agt gtg acc aat tca gtg aaa gga acg aat gcg 380
46 Arg Tyr Cys Asn Ala Ser Val Thr Asn Ser Val Lys Gly Thr Asn Ala
47                                     40           45           50
48
49 att ctc tgg acc tgt ttg gga ctg agc tta ata att tct ttg gca gtt 428
50 Ile Leu Trp Thr Cys Leu Gly Leu Ser Leu Ile Ile Ser Leu Ala Val
51                                     55           60           65           70
52
53 ttc gtg cta atg ttt ttg cta agg aag ata agc tct gaa cca tta aag 476
54 Phe Val Leu Met Phe Leu Leu Arg Lys Ile Ser Ser Glu Pro Leu Lys
55                                     75           80           85
56
57 gac gag ttt aaa aac aca gga tca ggt ctc ctg ggc atg gct aac att 524
58 Asp Glu Phe Lys Asn Thr Gly Ser Gly Leu Leu Gly Met Ala Asn Ile
59                                     90           95           100

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61 gac ctg gaa aag agc agg act ggt gat gaa att att ctt ccg aga ggc 572
62 Asp Leu Glu Lys Ser Arg Thr Gly Asp Glu Ile Ile Leu Pro Arg Gly
63 105 110 115
65 ctc gag tac acg gtg gaa gaa tgc acc tgt gaa gac tgc atc aag agc 620
66 Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys Glu Asp Cys Ile Lys Ser
67 120 125 130
69 aaa ccg aag gtc gac tct gac cat tgc ttt cca ctc cca gct atg gag 668
70 Lys Pro Lys Val Asp Ser Asp His Cys Phe Pro Leu Pro Ala Met Glu
71 135 140 145
73 gaa ggc gca acc att ctt gtc acc acg aaa acg aat gac tat tgc aag 716
74 Glu Gly Ala Thr Ile Leu Val Thr Thr Lys Thr Asn Asp Tyr Cys Lys
75 155 160 165
77 agc ctg cca gct gct ttg agt gct acg gag ata gag aaa tca att tct 764
78 Ser Leu Pro Ala Ala Leu Ser Ala Thr Glu Ile Glu Lys Ser Ile Ser
79 170 175 180
81 gct agg taattaacca tttcgactcg agcagtgcca ctttaaaaat cttttgtcag 820
82 Ala Arg
85 aatagatgat gtgtcagatc tcttttaggat gactgtatatt ttcagttgcc gatacagctt 880
86 tttgtcctct aactgtggaa actctttatg ttagatatat ttctctaggt tactgttggg 940
87 agcttaatgg tagaaacttc cttggtttca tgattaaagt cttttttttt cctga 995
89 <210> SEQ ID NO: 2
90 <211> LENGTH: 184
91 <212> TYPE: PRT
92 <213> ORGANISM: Homo sapiens
94 <400> SEQUENCE: 2
95 Met Leu Gln Met Ala Gly Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser
96 1 5 10 15
97 Leu Leu His Ala Cys Ile Pro Cys Gln Leu Arg Cys Ser Ser Asn Thr
98 20 25 30
99 Pro Pro Leu Thr Cys Gln Arg Tyr Cys Asn Ala Ser Val Thr Asn Ser
100 35 40 45
101 Val Lys Gly Thr Asn Ala Ile Leu Trp Thr Cys Leu Gly Leu Ser Leu
102 50 55 60
103 Ile Ile Ser Leu Ala Val Phe Val Leu Met Phe Leu Leu Arg Lys Ile
104 65 70 75 80
105 Ser Ser Glu Pro Leu Lys Asp Glu Phe Lys Asn Thr Gly Ser Gly Leu
106 85 90 95
107 Leu Gly Met Ala Asn Ile Asp Leu Glu Lys Ser Arg Thr Gly Asp Glu
108 100 105 110
109 Ile Ile Leu Pro Arg Gly Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys
110 115 120 125
111 Glu Asp Cys Ile Lys Ser Lys Pro Lys Val Asp Ser Asp His Cys Phe
112 130 135 140
113 Pro Leu Pro Ala Met Glu Gly Ala Thr Ile Leu Val Thr Thr Lys
114 145 150 155 160
115 Thr Asn Asp Tyr Cys Lys Ser Leu Pro Ala Ala Leu Ser Ala Thr Glu
116 165 170 175
117 Ile Glu Lys Ser Ile Ser Ala Arg
118 180

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120 <210> SEQ ID NO: 3
121 <211> LENGTH: 1377
122 <212> TYPE: DNA
123 <213> ORGANISM: Homo sapiens
125 <220> FEATURE:
126 <221> NAME/KEY: CDS
127 <222> LOCATION: (14)...(892)
129 <400> SEQUENCE: 3
130 agcatcctga gta atg agt ggc ctg ggc cgg agc agg cga ggt ggc cgg 49
131 Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg
132 1 5 10
133 134 agc cgt gtg gac cag gag gag cgc ttt cca cag ggc ctg tgg acg ggg 97
135 Ser Arg Val Asp Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly
136 15 20 25
137 138 gtg gct atg aga tcc tgc ccc gaa gag cag tac tgg gat cct ctg ctg 145
139 Val Ala Met Arg Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu
140 30 35 40
141 142 ggt acc tgc atg tcc tgc aaa acc att tgc aac cat cag agc cag cgc 193
143 Gly Thr Cys Met Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg
144 45 50 55 60
145 146 acc tgt gca gcc ttc tgc agg tca ctc agc tgc cgc aag gag caa ggc 241
147 Thr Cys Ala Ala Phe Cys Arg Ser Leu Ser Cys Arg Lys Glu Gln Gly
148 65 70 75
149 150 aag ttc tat gac cat ctc ctg agg gac tgc atc agc tgt gcc tcc atc 289
151 Lys Phe Tyr Asp His Leu Leu Arg Asp Cys Ile Ser Cys Ala Ser Ile
152 80 85 90
153 154 tgt gga cag cac cct aag caa tgt gca tac ttc tgt gag aac aag ctc 337
155 Cys Gly Gln His Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu
156 95 100 105
157 158 agg agc cca gtg aac ctt cca cca gag ctc agg aga cag cgg agt gga 385
159 Arg Ser Pro Val Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser Gly
160 110 115 120
161 162 gaa gtt gaa aac aat tca gac aac tcg gga agg tac caa gga ttg gag 433
163 Glu Val Glu Asn Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu Glu
164 125 130 135 140
165 166 cac aga ggc tca gaa gca agt cca gct ctc ccg ggg ctg aag ctg agt 481
167 His Arg Gly Ser Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu Ser
168 145 150 155
169 170 gca gat cag gtg gcc ctg gtc tac agc acg ctg ggg ctc tgc ctg tgt 529
171 Ala Asp Gln Val Ala Leu Val Tyr Ser Thr Leu Gly Leu Cys Leu Cys
172 160 165 170
173 174 gcc gtc ctc tgc tgc ttc ctg gtg gcg gtg gcc tgc ttc ctc aag aag 577
175 Ala Val Leu Cys Cys Phe Leu Val Ala Val Ala Cys Phe Leu Lys Lys
176 175 180 185
177 178 agg ggg gat ccc tgc tcc tgc cag ccc cgc tca agg ccc cgt caa agt 625
179 Arg Gly Asp Pro Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg Gln Ser
180 190 195 200
181 182 ccg gcc aag tct tcc cag gat cac gcg atg gaa gcc ggc agc cct gtg 673
183 Pro Ala Lys Ser Ser Gln Asp His Ala Met Glu Ala Gly Ser Pro Val

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184 205                210                215                220
186 agc aca tcc ccc gag cca gtg gag acc tgc agc ttc tgc ttc cct gag 721
187 Ser Thr Ser Pro Glu Pro Val Glu Thr Cys Ser Phe Cys Phe Pro Glu
188                225                230                235
190 tgc agg gcg ccc acg cag gag agc gca gtc acg cct ggg acc ccc gac 769
191 Cys Arg Ala Pro Thr Gln Glu Ser Ala Val Thr Pro Gly Thr Pro Asp
192                240                245                250
194 ccc act tgt gct gga agg tgg ggg tgc cac acc agg acc aca gtc ctg 817
195 Pro Thr Cys Ala Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val Leu
196                255                260                265
198 cag cct tgc cca cac atc cca gac agt ggc ctt ggc att gtg tgt gtg 865
199 Gln Pro Cys Pro His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys Val
200                270                275                280
202 cct gcc cag gag ggg ggc cca ggt gca taaatggggg tcagggaggg 912
203 Pro Ala Gln Glu Gly Pro Gly Ala
204 285                290
206 aaaggaggag ggagagagat ggagaggagg ggagagagaa agagagggtg ggagagggga 972
207 gagagatatg aggagagaga gacagaggag gcagaaaggg agagaaacag aggagacaga 1032
208 gaggagagaga gagacagagg gagagagaga cagaggggaa gagaggcaga gagggaaga 1092
209 ggcagagaag gaaagagaca ggcagagaag gagagaggca gagagggaga gaggcagaga 1152
210 gggagagagg cagagagaca gagagggaga gagggacaga gagagataga gcaggaggtc 1212
211 ggggcactct gagtccaggt tcccagtgca gctgtaggtc gtcacacacgt aaccacacgt 1272
212 gcaataaagt cctcgtgcct gctgctcaca gcccccgaga gcccctctc ctggagaata 1332
213 aaacctttgg cagctgccct tcctcaaaaa aaaaaaaaaa aaaaa 1377
215 <210> SEQ ID NO: 4
216 <211> LENGTH: 293
217 <212> TYPE: PRT
218 <213> ORGANISM: Homo sapiens
220 <400> SEQUENCE: 4
221 Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp
222 1 5 10 15
223 Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg
224 20 25 30
225 Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
226 35 40 45
227 Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
228 50 55 60
229 Phe Cys Arg Ser Leu Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp
230 65 70 75 80
231 His Leu Leu Arg Asp Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His
232 85 90 95
233 Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val
234 100 105 110
235 Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser Gly Glu Val Glu Asn
236 115 120 125
237 Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu Glu His Arg Gly Ser
238 130 135 140
239 Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu Ser Ala Asp Gln Val
240 145 150 155 160

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```

241 Ala Leu Val Tyr Ser Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys
242           165           170           175
243 Cys Phe Leu Val Ala Val Ala Cys Phe Leu Lys Lys Arg Gly Asp Pro
244           180           185           190
245 Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg Gln Ser Pro Ala Lys Ser
246           195           200           205
247 Ser Gln Asp His Ala Met Glu Ala Gly Ser Pro Val Ser Thr Ser Pro
248           210           215           220
249 Glu Pro Val Glu Thr Cys Ser Phe Cys Phe Pro Glu Cys Arg Ala Pro
250 225           230           235           240
251 Thr Gln Glu Ser Ala Val Thr Pro Gly Thr Pro Asp Pro Thr Cys Ala
252           245           250           255
253 Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val Leu Gln Pro Cys Pro
254           260           265           270
255 His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys Val Pro Ala Gln Glu
256           275           280           285
257 Gly Gly Pro Gly Ala
258           290
260 <210> SEQ ID NO: 5
261 <211> LENGTH: 285
262 <212> TYPE: PRT
263 <213> ORGANISM: Homo sapiens
265 <400> SEQUENCE: 5
266 Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu
267 1           5           10           15
268 Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro
269           20           25           30
270 Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu
271           35           40           45
272 Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys Leu Thr Val Val
273           50           55           60
274 Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
275 65           70           75           80
276 Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly
277           85           90           95
278 Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu
279           100          105          110
280 Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn
281           115          120          125
282 Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln
283           130          135          140
284 Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys
285 145          150          155          160
286 Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser
287           165          170          175
288 Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr
289           180          185          190
290 Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met
291           195          200          205

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VERIFICATION SUMMARY

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Input Set : A:\01-04.SEQ.txt

Output Set: N:\CRF3\02262002\J068725.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date